From 190 visual field records of patients at the Government Clinic, with central nervous system syphilis, 70 cases of syphilitic primary optic atrophy were selected and asked to report back for recheck of fields. Thirty patients reported back and from these we note:

Average age on admission	49.8 yrs 7.5 yrs
Average age now	57.3 yrs
Visual fields on admission: 4 full	fields
$ \begin{array}{c c} \text{Visual fields after treatment:} \\ 4 \text{ improved.} \\ 23 \text{ unchanged.} \\ 3 \text{ reduced.} \end{array} \right\} \begin{array}{c} 13.3\% \text{ improved} \\ 76.6\% \text{ unchanged} \\ 10.0\% \text{ reduced.} \end{array} \right\} $	89.9%

Malaria given in 21 not given in 9, of which 7 were over 60 years on admission.

Tryparsamide, all cases but 3, average number 35 Neoarsphenamine, all cases, average number 38.1 Bismuth, all cases, average number, 86.1

Tryparsamide was given to 90% of all cases in the series without untoward effect although other cases gave symptoms and the drug was stopped. Patients did not receive vitamins to augment their treatment.

Over an average of 7.5 years cases were observed of which at least 85% were syphilitic optic atrophy as recorded by their changed visual fields. After treatment 90% retained their visual fields and vision.

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Résumé

Les données pathogéniques de l'atrophie optique primitive au cours de la syphilis nerveuse sont exposées et discutées: il s'agit vraisemblablement d'une névrite interstitielle avec dégénérescence subséquente des fibres du nerf optique. L'étude du champ visuel, répétée plusieurs fois, renseigne exactement sur l'évolution de l'atrophie optique; les divers aspects observés sont consignés en détail. Le pronostic de ces états est sérieux mais le traitement par la tryparsamide ne semble pas avoir causé d'aggravation. On cessa d'administrer cet arsénical chez environ 10% de ces malades qui ne le supportaient pas. En somme, après le traitement—sans adjuvant vitaminique—90% des malades conservèrent le champ visuel et la vision qu'ils avaient avant le traitement. JEAN SAUCIER

URETERO VESICAL ANASTOMOSIS WHEN THE PROXIMAL PORTION OF THE **URETER IS SHORT***

By R. H. Flocks, M.D.

Professor of Urology, University of Iowa School of Medicine, Iowa City, Iowa

Y/HEN one is confronted with the problem of a short, dilated proximal ureter, a destroyed distal ureter in a single kidney, or with a poor kidney on the other side, what means do we have at our disposal for the care of this? (Table I). Nephrectomy cannot be done because there is either no, or too little, renal tissue on the other side. Anastomosis to the bowel is fraught with risk because of the dilatation of the ureter and associated renal infection. Permanent nephrostomy, pyelostomy, or ureterostomy is applicable. This can usually be done safely, and will adequately care for the disposal of the urine. However, it leaves the patient with the necessity of wearing a catheter, other collecting apparatus, and periodic changes of catheters by the physician. It does not return the patient to normalcy. Ureterovesical anastomosis by the usual methods is impossible because of the distance between the end of the proximal ureter and the bladder. The only reports in the literature that I have knowledge of where ureterovesical anastomosis was carried out by means applicable to such a situation are those of Spies, Johnson, and Wilson, and Ockerblad and Carlson.

Spies, Johnson, and Wilson in dogs carried out ureterovesical anastomosis by means of flaps of bladder. They turned a flap of bladder from

^{*} Read at the Seventy-seventh Annual Meeting of the Canadian Medical Association, Section of Urology, Banff, Alberta, June 14, 1946.

the fundus downward having its broadest portion attached to the bladder. They stated that usually a stricture formed at the point of anastomosis. Ockerblad and Carlson had two patients where this problem arose. In one they freed the kidney and by bringing it down and loosening up the ureter, as has also been suggested by Dodson, were able to anastomose the ureter to the bladder in the usual manner. In a second case they used a bladder flap similar to that described by Spies, Johnson, and Wilson with a good result.

It is the purpose of this report to describe a case presenting the problem outlined above which was treated by anastomosing the proximal ureter to the bladder by the use of a bladder flap. The method of anastomosis will be described in detail and the result in this patient given.

TABLE I.

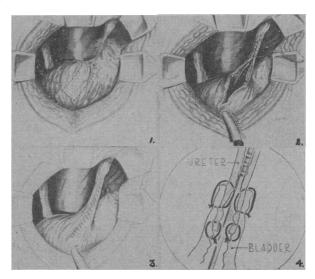
- Nephrostomy—easy to do. Low mortality, means permanent fistula.
- Pyelostomy. Low mortality, means permanent fistula.
- 3. Cutaneous ureterostomy. Low mortality, means permanent fistula.
- 4. Uretero intestinal anastomosis—high mortality, difficult.
- 5. Mobilizing kidney and straightening ureter to add length to it so that ordinary ureterovesical anastomosis can be done. Easy, low mortality, may be used in combination with Nos. 3, 4, or 6.
- 6. Bladder flap method of uretero-vesical anastomosis—easy, low mortality.

METHOD

The method used in this patient is illustrated in Figs. 1, 2, 3 and 4. An incision is made along the anterior wall of the bladder which is rectangular in shape and which is somewhat wider at its point of attachment to the bladder than at the end which is to be attached to the ureter. This averages 3 cm. in width and is as long as is necessary for the case in question. This is laid back as illustrated and the ureter attached to its mucosal surface with several No. 00 chromic catgut sutures. It is then closed over a No. 8 ureteral catheter with a double row of No. 00 interrupted chromic catgut sutures essentially as shown in the diagrams. These two rows of sutures are continued down over the bladder closing this tightly after adequate drainage of the bladder and after a Pezzer catheter and the ureteral catheter used for a splint have each been brought out of the bladder through a small puncture wound. The space about the bladder is drained with a

cigarette drain and the incision closed with interrupted catgut sutures in the usual manner.

By the use of the bladder flap as illustrated the anastomosis to the bladder was made without tension, even though the distance between the most cephalad portion of the bladder and the stump of the ureter was over 7 cm. The ureteral catheter splint insures good drainage of the kidney while healing takes place and keeps the region of the anastomosis in apposi-

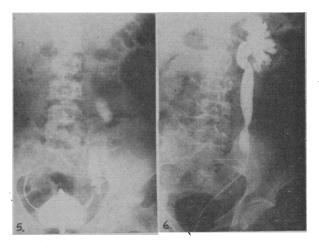


tion and alignment during the period of healing. The suprapubic vesical drain keeps the bladder at rest during the healing process.

CASE REPORT

D.B., a 41 year old white male, entered the University Hospitals on April 25, 1945, complaining of chills, fever, and intermittent urinary drainage from two sinuses, one on each side in the lower quadrants of the abdomen.

He gave the following history: For more than 15 years he had had attacks of pain sometimes in one flank, sometimes in the other. In August, 1944, he saw a physician for this and a diagnosis of bilateral ureteral stones was made. On September 7, 1944, a stone about



one centimeter in diameter was removed from the lower portion of the left ureter. This incision failed to heal completely and continued to drain urine. In spite of this, on September 30, a stone was removed from the lower portion of the left ureter through a similar incision. This wound also continued to drain urine intermittently. On April 14, 1945, urinary drainage stopped from both sides. The patient ceased to pass any urine at all through his bladder and he became very ill. He began to have recurring chills and fever, nausea, vomiting. He lost much weight. Because of all this he entered the hospital on April 25, 1945.

The examination at that time showed a poorly nourished, anæmic looking white male. He was passing not more than 25 c.c. of urine per day—a culture of which showed Staph. aureus and pyocyaneus. The urine was loaded with pus and erythrocytes. On the abdomen there were bilateral scars, 12 to 13 cm. long in the lower abdomen. The right seemed newly healed. The left was draining slightly from several sinuses. The blood showed a urea nitrogen of 28.0 mgm. and a creatinine of 3.5 mgm. per 100 c.c. Plain film showed many small stone shadows in the lower portion of the left kidney. Excretory urograms showed no function on the right with some function on the left with extreme dilatation of the left kidney pelvis and ureter. Attempts were made to pass ureteral catheters up to the kidney pelves. These were unsuccessful. On the right the catheter went up about 8 cm.; on the left only 2 cm. Obstruc-tion on the right was complete and no skiodan solution could be forced by it. On the left side some of the skiodan solution came out through the abdominal fistula. The rest followed up the ureter visualizing a distorted, the right ureter was exposed extraperitoneally in the region of the constriction and for some distance above and below this. The scar tissue was in part sidetracked and the much dilated proximal and distal portions of the ureter mobilized and anastomosed with interrupted No. 00 chromic catgut sutures over a No. 8 ureteral catheter and a No. 12 T tube which was inserted into the ureter through a small stab wound about 3 cm.

above the region of the anastomosis.

On May 11, a pyelogram was made through the splinting catheter. The patient steadily improved, excreting large quantities of urine through the splinting catheter, the end of which came out through the urethra. However, he still drained urine from the fistula on the left side. The T tube was removed on the 14th post-operative day and the ureteral catheter a few days later. When this was done, the patient passed large quantities of urine through the bladder, showing that the right kidney had resumed its function. He left the hospital on June 18, greatly improved. Blood urea nitrogen and creatinine were normal, he was feeling well, passing much urine through the bladder, but still draining urine from the fistulæ on the left side.

The patient continued to gain in strength, but otherwise his condition remained unchanged. He therefore entered the hospital on October 1, 1945, for an operation on the left side to cure him of the constant urinary drainage there. The excretory urogram at this time, showed function on the right with much hydronephrosis and hydroureter. No function was present on the left. A ureteral catheter passed up to the renal pelvis easily on the right. On the left, obstruction was met 2 cm. from the ureteral orifice. On October 5, an operation was performed on the left side with the intent of carrying out a procedure similar to the one performed on the right side. This was impossible because of the very extensive scarring on the left side of the bony pelvis and destruction by scarring of the distal 10 cm. of ureter. Also the proximal ureter was greatly dilated and its wall was considerably thickened. After much deliberation an anastomosis by the method described and illustrated above was carried out. The patient got along nicely, the splinting catheter and suprapubic tube were both removed in two weeks and the bladder permitted to heal, which it did promptly. On November 7,-three

weeks after removal of the splinting catheter—the new orifice could easily be catheterized and a No. 7 catheter passed into the left renal pelvis. No ureteral reflux or other abnormality could be demonstrated by cystogram (Fig. 6). The patient left the hospital voiding normally with all wounds healed on November 24. On March 18, 1946; his condition had remained excellent and his urine showed only a few pus cells per high power field.

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RADIOLOGY AND THE GENERAL PRACTITIONER*

By Bede J. Harrison, M.B.

Vancouver, B.C.

[Exupéry]. These words draw attention to the epidemic of nominalism which with its usual sequelæ has spread so widely among us in recent years. The avalanche of material things which pours from the production line has so affected man that he finds it difficult to think otherwise than in terms of material things. Hence all around us we see the symbol becoming confused with the thing it represents.

The taint affects our own profession. Surgical interference is mistaken for treatment. Diseases are mistaken for patients; histological slides for diseases; x-ray apparatus for radiographs, and radiographs for diagnoses.

Such professional mistakes are made less frequently by the medical expert than by the medical amateur, but no branch of the profession has escaped entirely. The percentage of radiological amateurs among the whole of the members of the profession is quite high. Many of them seem to think that any x-ray film has its full story plainly written in the photographic emulsion for anyone to read who wishes. Many medical men who would not think of expressing an opinion on a histological slide seem to think that they can unravel the whole of the story written on the x-ray film and they have no hesitation in carrying out treatment based upon that opinion. To all such amateurs I would recommend the words quoted above: "What is essential is invisible to the eye".

^{*} Read at the Seventy-seventh Annual Meeting of the Canadian Medical Association, General Session, Banff, Alberta, June 12, 1946.